

5241371

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
19 February 2004 (19.02.2004)

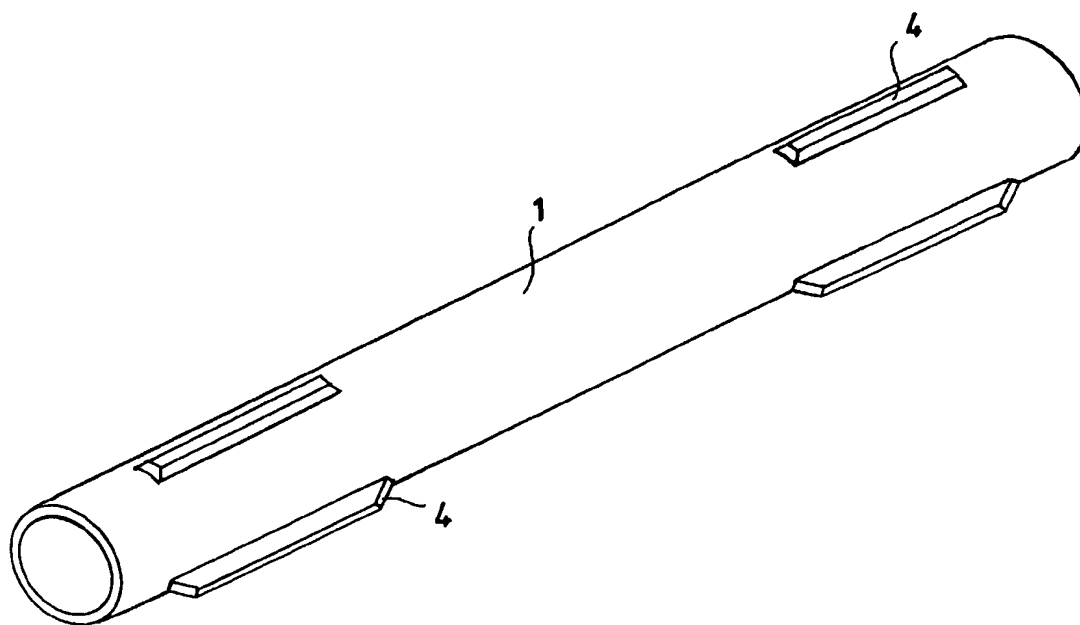
PCT

(10) International Publication Number
WO 2004/015238 A1

- (51) International Patent Classification⁷: **E21B 17/10**
- (21) International Application Number: **PCT/IT2002/000536**
- (22) International Filing Date: **12 August 2002 (12.08.2002)**
- (25) Filing Language: **English**
- (26) Publication Language: **English**
- (71) Applicant (for all designated States except US): **ENI S.P.A. [IT/IT]; Piazzale E. Mattei, 1, I-00144 Rome (IT).**
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **BAYNHAM, Richard, Ronald [CA/IT]; Via Trieste, 889, I-48023 Marina di Ravenna (IT). LEVIE, David [GB/DE]; Moltkestrasse 36B, 32257 Bünde (DE). BARYSHNIKOV, Anatoly [RU/IT]; Via Ferrandina, 18/B, I-20097 San Donato Milanese (IT).**
- (74) Agents: **DE GREGORI, Antonella et al.; Ing. Barzano' & Zanardo Milano S.p.A., Via Borgonuovo, 10, I-20121 Milan (IT).**
- (81) Designated States (*national*): **AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW.**
- (84) Designated States (*regional*): **ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).**
- Published:
— with international search report

[Continued on next page]

(54) Title: INTEGRAL CENTRALISER



(57) Abstract: A method of providing at least one projection (4) on a tubular body (1) of the type required by the oil and gas industry for use in recovery of and transporting of crude oil or gas, namely oil-country-tubular goods (OCTG), said projection (4) having a predetermined form such as a blade, ribbing, or the like stand-off projection, by providing materials capable of being moulded, applying a mould to a tubular (OCTG) body, and moulding said materials using said mould onto said tubular body (1).



WO 2004/015238 A1



For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.